



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/729,332

12/05/2003

Joseph Kwak

I-2-0453.1US

1134

24374 7590 07/02/2008

VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA, SUITE 1600
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

EXAMINER

NGUYEN, SIMON

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

07/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/729,332	Applicant(s) KWAK ET AL.	
	Examiner SIMON D. NGUYEN	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44, 46-53 and 55-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 44, 46-53, 55-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant is advised that the Notice of Allowance mailed 4/14/08 is vacated. If the issue fee has already been paid, applicant may request a refund or request that the fee be credited to a deposit account. However, applicant may wait until the application is either found allowable or held abandoned. If allowed, upon receipt of a new Notice of Allowance, applicant may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a specified Deposit Account.

2. Prosecution on the merits of this application is reopened on claims 44, 46-53, and 55-73 considered unpatentable for the reasons indicated below:

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 44, 46-53, and 55-73 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 44, the method claim is not support in the original disclosure:

a) the first limitation "determining a first value indicating a total received radio frequency energy level at an antenna connector, the total received radio frequency energy is a sum of a desired signal noise and interference power." The only portion of the specification which discusses total received radio frequency energy being the sum of a desired signal, noise and interference power is at paragraph [0022], lines 1-3, which discusses the RSSI which is considered by the disclosure to be conventional.

b) the second limitation "determining a second value representative of a noise and interference histogram of a channel, wherein the histogram is a received power indicator histogram." The closed description in the specification for such a value appears to be at paragraphs (0009), and is considered by the disclosure to be conventional.

c) the third limitation "deriving the parameter representing a signal to noise plus interference value based on the first and second values." The original disclosure does not support the limitation. There is not disclosure of deriving a parameter representing a signal to noise pulse interference value based on the first and second values as defined previously by the claims. In other words there is no disclosure of deriving a parameter representing signal to noise plus interference value based on a first value which indicates a sum of a desired signal, noise and interference power and a second value which is representative of an RPI histogram, The parameter being claimed appears to be intended to correspond to the PSNI indicator, described in paragraphs [0047] and [0048]. However, there is no disclosure of the invention being claimed in claim 44. In

fact, the disclosure appears to make it a point that the PSNI is not related to the RSSI, (paragraphs [0025] and [0059]).

Regarding claim 53, this claim is rejected for the same reason as set forth as apparatus of method claim 44 as being recited the same limitations recited in claim 44 discussed above. Therefore, claim 53 is also not supported in the original disclosure.

Regarding claim 61, the method claim is not supported in the original disclosure.

a) the first limitation is the same as the first limitation of claim 44.

b) the second limitation “determining a second value representative of a noise and interference histogram of a channel.” The closest description in the specification for such a value appears to be at paragraph [0009] (the RPI histogram), and is considered by the disclosure to be conventional.

c) the third limitation “deriving the parameter representing a signal to noise plus interference value based on the first and second values, and wherein the parameter is an 8-bit unsigned integer value.” The original disclosure does not support the limitation. The parameter appears to correspond to the PSNI as it is the only parameter described in the specification as being an “8-bit unsigned integer value.” (paragraph [0059]). There is no disclosure of deriving a parameter representing a signal to noise plus interference value based on the first and second values as defined previously by the claims. There is also no disclosure of deriving a parameter in such a manner wherein the parameter is an 8-bit unsigned value. If the parameter does in fact correspond to the PSNI, there is not disclosure of the PSNI being derived based on the first and second values as required by the claim. In other works therein no disclosure of deriving a parameter,

which is an 8-bit unsigned integer value and representing signal to noise plus interference value based on a first value which indicates a sum of a desired signal, noise and interference power (e.g., RSSI or anything similar) and a second value which is representative of a noise and interference histogram of a channel. In fact, the disclosure appears to make it a point that the PSNI is not related to the RSSI (paragraphs [0025] and [0059]).

Regarding claim 68, this claim is rejected for the same reason as set forth as apparatus of method claim 61 as being recited the same limitations recited in claim 61 discussed above. Therefore, claim 68 is also not supported in the original disclosure.

Regarding dependent claims 46, 47-52, 55-60, 62-67, 69-73, it is also advised that the applicant should recheck limitations of the dependent claims to make sure they are supported in the specification.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (571) 272-7894. The examiner can normally be reached on Monday-Friday from 7:00 AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 30, 2008

/SIMON D NGUYEN/
Primary Examiner, Art Unit 2618